

Title (en)

GLASS FOR HIGH AND FLAT GAIN 1.55  $\mu$ m OPTICAL AMPLIFIERS

Title (de)

GLAS MIT HOHEM UND FLACHEM VERSTÄRKUNGSFAKTOREN FÜR OPTISCHE VERSTÄRKER BEI 1,55 MIKROMETER

Title (fr)

VERRE POUR AMPLIFICATEURS OPTIQUES 1,55  $\mu$ m A GAIN LINÉAIRE ELEVÉ

Publication

**EP 1010220 A4 20010704 (EN)**

Application

**EP 98943193 A 19980812**

Priority

- FR 9711054 A 19970905
- US 9816791 W 19980812

Abstract (en)

[origin: FR2768143A1] The invention relates to a family of erbium-doped fluorophosphate glasses for use in optical signal amplification. The composition, based on 100 parts by weight, is constituted by: P<sub>2</sub>O<sub>5</sub> 15-40, Al<sub>2</sub>O<sub>3</sub> 0-5, MgO 0-9, CaO 0-9, SrO 0-9, BaO 0-45, AlF<sub>3</sub> 5-25, MgF<sub>2</sub> 0-10, CaF<sub>2</sub> 0-25, SrF<sub>2</sub> 0-25, BaF<sub>2</sub> 0-20, KHF<sub>2</sub> 0-2, K<sub>2</sub>TiF<sub>6</sub> 0-2, with up to 10 parts by weight of erbium oxide. The glasses according to the present invention exhibit a high gain and a very flat spectrum over the 1550 nm bandwidth, as compared to the glasses of the figure. These glass compositions are particularly well suited for use in fiber or planar optical amplification in WDM and similar applications.

IPC 1-7

**C03C 3/247; C03C 4/00; H01S 3/06**

IPC 8 full level

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Citation (search report)

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- See references of WO 9913541A1

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